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Doc. # INT-100113-001 Rev 2
Part #: 191-537
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DTK-HT1000

Home Theater Power Conditioner

User Guide

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1-800-753-2345

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MAKING A CLAIM UNDER THE CONNECTED EQUIPMENT PROTECTION POLICY:

1. If all the conditions of qualifying for coverage are satisfied, call the DITEK customer service department at 800-753-2345 to obtain a Claim Form and a Return Material Authorization (RMA) number for the return of the DITEK HT1000 Home Theater Power Conditioner. DITEK will send you a Claim Form that must be filled out and returned within ten (10) days.
2. Mark the RMA number on the damaged DITEK Product with indelible ink, enclose the completed Claim Form and return to DITEK along with a copy of your sales receipt for the DITEK Product.
3. Mark the RMA number on the outside of the box.
4. Ship the package prepaid to: Attn: RMA# _____
   DITEK
   1720 Starkey Road
   Largo, FL 33771

5. DITEK will examine the returned Product to determine its condition and look for evidence of transient surge failure. A DITEK Product will be damaged by any surge that can damage down stream equipment. If there is evidence of surge damage to the DITEK Product, then DITEK will, at its option, send a call tag to pickup the damaged connected equipment for evaluation, or alternately, authorize you to have the equipment repaired or reimburse you for the fair market value as determined by DITEK, up to the dollar limits stated for that particular product. If there is no evidence of surge damage to the DITEK Product, then DITEK will reject your claim.
6. If you are authorized by DITEK to have the damaged equipment repaired, the repair must be performed at a service center authorized by the equipment's manufacturer. DITEK reserves the right to contact the service center directly to discuss damage and repair costs. DITEK may, at its discretion, issue payment to you in reimbursement for the fair market value of the connected equipment damaged. If you receive reimbursement for the fair market value, DITEK reserves the right to require you to transfer title and deliver the damaged equipment to DITEK.

LIMITS OF COVERAGE UNDER THE CONNECTED EQUIPMENT PROTECTION POLICY

DITEK PRODUCT MODEL	DOLLAR LIMIT	PERIOD
DTK-HT1000	$150,000	3 years

This Connected Equipment Protection Policy becomes effective on July 1, 2008 and supersedes and cancels all previous Connected Equipment Guarantees and Policies.

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met. This Policy covers damage caused by voltage spikes and surges, which enter the connected equipment via surge-protected wires. It does not cover damage from continuous over-voltage such as occurs when the power company crosses lines, open neutrals, or direct lightning strikes.

QUALIFYING CONDITIONS FOR CONNECTED EQUIPMENT COVERAGE:

1. A DITEK HT1000 Home Theater Power Conditioner designed for the application must have protected all wires leading into the damaged equipment. The presence of a competitive brand of power conditioners or surge protectors in the circuit will void coverage.
2. A transient voltage surge must have entered the damaged equipment via surge-protected wires.
3. The DITEK Product must be installed in accordance with DITEK's installation instructions. All installations must comply with the applicable electrical and safety codes set forth by the National Electrical Code (NEC) or Canadian Electrical (CE) Code and any local codes.
4. The DITEK HT1000 Home Theater Power Conditioner must show signs of surge damage.
5. The connected equipment shall be UL or CSA listed and/or shall have all applicable and pertinent agency approvals and certifications.
6. Any claim under this Connected Equipment Protection Policy must be made within ten (10) days of the date of damage to the equipment.
7. The Connected Equipment Protection Policy covers only standard indoor equipment and only in the United States or Canada.

WHAT IS NOT COVERED UNDER THIS CONNECTED EQUIPMENT POLICY:

1. Damage to electronic equipment resulting from a transient voltage surge on unprotected wires or lines.
2. Restoration of lost data and/or reinstallation of software.
3. Damage caused by lack of grounding.
4. Damage caused by abuse, misuse, alteration or negligence.
5. Damage caused by accidents, fires or natural disaster such as wind, flood or direct lightning.
6. DITEK shall in no way be liable for any damages not specifically included in this policy, including, but not limited to, direct, indirect, incidental, consequential or multiple damages arising from the use of the Product or damage to the connected equipment, regardless of the legal theory on which the claim is based. DITEK shall not be held liable for losses due to loss of software, cost of substitute equipment, facilities or services, loss of profits, loss of revenue, or claims of third parties including customers and insurance companies.

DTK-HT1000 User Guide

Introduction

Thank you for purchasing the DTK-HT1000 Home Theater Power Conditioner. The HT1000 provides clean AC power to sensitive home theater equipment, ensuring the best possible picture and sound quality. It also protects all AC outlets, Cable/Satellite connections, network connections, and telephone lines from incoming surges.

Features

- Six isolated AC filter banks (2 outlets each), with filtering circuitry tailored for the different connected equipment – plasma or LCD televisions, audio and video components, and amplifiers.
- Front LCD shows voltage and current draw (total or per bank), wiring and surge protection integrity, and status of switching and outlet delay.
- Outlet banks are programmable for Always On or Delay operation, with 5, 10 or 15 second delay settings.
- Remote AC and DC triggers allow remote activation and shutdown of switched outlets.
- Thirteen NEMA 5-15R Outlets, 6 isolated banks of 2 outlets, plus one front-mounted convenience outlet.
- Electrical Rating: 15A, 125VAC, 60Hz, 1875 Watts.
- Surge Current Capacity: 373,500 Amps.
- Surge Energy Joule Rating: 7266J.
- Surge Protection Modes: L-N, L-G, N-G (Power)
- UL Clamping Voltage: 330V
- EMI/RFI Filtering: up to 70 dB, 150kHz – 100MHz
- DC Trigger Input
  - Connector: 1/8" (3.5mm) mono mini-plug
  - Voltage: 3 - 30V DC
  - Current: 10 mA
- DC Trigger Output
  - Connector: 1/8" (3.5mm) mono mini-plug
  - Voltage: 12V DC
- LAN Protection
  - Connectors: RJ45, 8-pin (1 In & 1 Out)
  - Wires Protected: Pins 1, 2, 3 & 6
  - Data Speed 100Mbps (Cat. 5)
- TEL/FAX/Modem Protection
  - Connectors: RJ11, 3 pair (1 In & 2 Out)
  - Wires Protected: Pins 3 & 4
  - Surge Energy Joule Rating 160 Joules
- DSS / Coax Cable Protection
  - Clamping Level: <75V
  - Insertion Loss: < 0.1 dB
  - Connectors: Female "F", Gold Plated (4 In & 4 Out)
- Warranty: Three Year Limited Warranty
- Connected Equipment Protection Policy: up to $150,000

Home Theater Power Conditioner
Catalog Number DTK-HT1000

Specifications

Physical Dimensions	
Dimensions	17.13″W x 12.95″D x 3.5″H (435mm x 329mm x 89mm)
Height with feet	4.0″(101.8mm)
Weight	16 pounds (7.26kg)
AC Electrical Characteristics	
Surge Protection	Yes
Overload Protection	Yes
Line Voltage	125V, 60Hz
UL1449 Suppression Rating	330V
Protection Modes	L-N, L-G, N-G
Maximum Current	15 A
Surge Current Capacity	373,500 Amps
Surge Energy Joule Rating	7,266 Joules
EMI/RFI Noise Filtration	
AC Outlets	70 dB, 150 KHz – 100 MHz
DC Trigger Input	
Connector	1/8″ (3.5mm) mono mini-plug
Voltage	3 - 30V DC
Current	10 mA
DC Trigger Output	
Connector	1/8″ (3.5mm) mono mini-plug
Voltage	12V DC

consistent with the installation instructions provided with the product and periodically updated on the DITEK web site, www.ditekcorp.com. This warranty does not apply if the cause of the failure to properly perform is fire, flood, windstorm, earthquake, direct lightning, or sustained over-voltage or open-neutral events.

Purchaser's rights under the warranty shall consist solely of requiring DITEK to repair, or at DITEK's sole discretion, replace, free of charge, F.O.B. factory, any defective items received at said factory within said three years and determined by DITEK to be defective. Providing or not providing any advice or recommendations by DITEK shall not constitute any warranty by or impose any liability upon DITEK.

The foregoing constitutes the sole and exclusive remedy of the purchaser and the exclusive liability of DITEK, AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESSED, IMPLIED OR STATUTORY AS TO THE MERCHANTABILITY, FITNESS FOR PURPOSE SOLD, DESCRIPTION, QUALITY, and PRODUCTIVENESS OR ANY OTHER MATTER. In no event shall DITEK be liable for special or consequential damages or for delay in performance of the warranty. At the end of the warranty period, DITEK shall be under no further warranty obligation expressed or implied.

The product covered by this warranty certificate can only be repaired or replaced by the factory. A RETURN MATERIAL AUTHORIZATION NUMBER (RMA) must be obtained by calling Customer Service at 800-753-2345. DITEK shall not be responsible for any transportation charges. Returned freight must be pre-paid

DITEK
CONNECTED EQUIPMENT PROTECTION POLICY

This Connected Equipment Protection Policy is not a warranty. For information on warranty, refer to the DITEK 3 Year Product Warranty. Nothing in this equipment protection policy affects the terms and conditions of the product warranty.

EQUIPMENT PROTECTION POLICY:

DITEK's HT1000 Home Theater Power Conditioner carries a Connected Equipment Protection Policy. This policy states that if a listed DITEK HT1000 Home Theater Power Conditioner should fail to protect your connected equipment from a transient voltage surge, DITEK will reimburse you for the fair market value, as determined by DITEK, or repair your equipment (DITEK's sole option), up to the dollar limits listed below, provided that all the conditions stated below are fully

TROUBLESHOOTING (continued)

If the equipment connected to the DTK-HT1000 does not have power:

- Verify that the wall outlet that the Power Conditioner is plugged into is providing power.

- Verify that the circuit breaker on the back of the Power Conditioner is not tripped. If it is, wait ten minutes then reset the circuit breaker. If the circuit breaker trips again, you may have home theater equipment connected that draws more than 15 Amps. Unplug components one at a time until the Power Conditioner can provide power to all connected equipment.

- Your equipment may be connected to powered-off "Switched" outlets. If this is the case, the LCD on the front will have this display: **SWITCHED** (ON) Press the front-mounted button to turn on power to the switched outlets.

- Your home theater components may not be turned on. Once you have determined that the Power Conditioner outlets are supplying AC power, turn on your components.

- If your equipment is still not receiving power, the DTK-HT1000 may have self-sacrificed to prevent surge damage or may be defective. If you suspect either to be the case, refer to this manual for DITEK contact information.

This is not the International Symbol For
Surge Protection...
Perhaps it should be!

3 YEAR MANUFACTURER'S WARRANTY

(DTK-BU Series, DTK-DRP16 Series, DTK-HT1000)

DITEK warrants equipment manufactured by it to be free from defects in materials and workmanship for three (3) years from the date of invoice from DITEK or its authorized sales channels. DITEK assumes no risk or liability for results of the use of the products purchased from it, including but without limiting the generality of the foregoing: (1) The use in combination with any electrical or electronic components, circuits, systems, assemblies or any other materials or substances; (2) Unsuitability of any product for use in any circuit or assembly. This warranty does not apply if the DITEK product has been misused, abused, altered, tampered with, or used in applications other than specified on the name plate or not used and/or installed

LAN Circuit Protection	
Connectors	RJ45, 8-pin (1 In & 1 Out)
Wires Protected	Pins 1, 2, 3 & 6
Data Speed	100Mbps (CAT5)

TEL/FAX/Modem Protection	
Connectors	RJ11, 3 pair (1 In & 2 Out)
Wires Protected	Pins 3 & 4
Surge Energy Joule Rating	160 Joules

DSS / Coax Cable Protection	
Voltage Clamping	<75V
Insertion Loss	< 0.1 dB
Connectors	Female "F", Gold Plated (4 In & 4 Out)

Package Contents

DTK-HT1000 Home Theater Power Conditioner

- User Manual
- Remote AC Control Cable
- Remote DC Control Cable (1/8" mini-plug cable)
- CAT 5 Cable
- RJ11 Phone Cable
- Coaxial Cable
- One pair of Rack-mount Brackets and Assembly Screws

PRODUCT SAFETY PRECAUTIONS

- When cleaning the DTK-HT1000, please unplug the Power Conditioner to reduce the risk of electric shock and allow it to cool. Do not use any liquid solvents, spray cleaners or water to clean the product.

- There are no replacement parts in the DTK-HT1000 Power Conditioner. Do not attempt to dissassemble or repair the product. If you suspect that your Power Conditioner is malfunctioning, please refer to this manual for DITEK contact and warranty information.

- Use this Power Conditioner only in dry, indoor locations. Do not use this Power Conditioner with aquariums, in an area susceptible to water spray, or if any liquid has been spilled on it. Serious injury or death could occur if these guidelines are not followed.

- This Power Conditioner must be directly connected to a three-prong, grounded indoor outlet. This Power Conditioner may not be used in conjunction with other surge protectors, power strips, or powered via a three-prong to two-prong adapter. Failure to follw these conditions may result in improper equipment operation, equipment damage, or injury, and may void the product warranty.

- If the Power Conditioner's power cord is placed near a heat source, such as baseboard registers, it may suffer damage and create a potential shock hazard. Do not place the AC power cord in an area with foot traffic, as it may create a trip hazard. If the AC power cord shows any signs of physical damage, immediately disconnect the Power Conditioner and refer to this manual for DITEK contact and warranty information.

- All external connections to A/V equipment, such as telephone lines, satellite dishes, cable TV connections, and radio antennae must be connected to the DTK-HT1000 to ensure proper protection for that equipment.

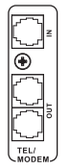
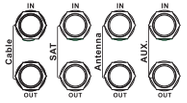
- Lightning storms are, by their very nature, severe and unpredictable. Your DTK-HT1000 Home Theater Power Conditioner provides extensive surge protection, but DITEK can not guarantee that all equipment will be protected in the case of lightning storms. In the event of lightning storms, DITEK recommends that you turn off your home theater equipment and, using the front-mounted power switch, turn off the DTK-HT1000.

a. AC Filter Indicator – indicates that the multiphase EMI/RFI Filter circuitry is working properly.
b. Voltmeter – displays the input voltage from the AC wall outlet.
c. Current Meter – displays the output current from the outlet banks. You can view the current output from all of the banks at the same time or from individual banks by selecting the "Bank" selection button.
d. Outlet Banks – displays the currently selected bank for monitoring output current.
e. Wiring – indicates whether the AC outlet is wired properly, or cross-wired. Indicators:
   ✔ Wiring OK
   ✖ Hot and Neutral Reversed
f. Ground – indicates the status of grounded AC outlet.
   ✔ Ground OK. The AC wall outlet is properly grounded.
   ✖ Ground Fault. This indicates that the AC wall outlet is NOT properly grounded.
g. Switched Indicator – indicates whether the "Switched" outlets are switched ON or OFF.
h. Timed Delay Indicator – indicates that the delayed outlets are switched ON after a delay.
i. Remote Indicator – indicates whether the Remote function is ON or OFF
j. Remote Button – switches the Power Conditioner to Remote ON status when pressed. When in Remote ON status, the Power Conditioner outlets programmed as switched are turned ON/OFF through external remote control signal.
k. Bank Selection Button – lets you select which outlet banks you want to monitor; press the button repeatedly to choose either a single bank or all banks.
l. Dimmer Button – adjusts the brightness of the LCD Control Panel; pressing it repeatedly changes the brightness level. There are six brightness levels.

GUIDE TO TROUBLESHOOTING

- LCD is indicating a wiring fault: WIRING ✖
  Verify that the Power Conditioner is plugged into a grounded three-prong outlet. If the wiring fault indicator remains, the outlet to which the Power Conditioner is connected has its "Hot" and "Neutral" wires improperly connected. You may have to consult an electrician to remedy the issue.

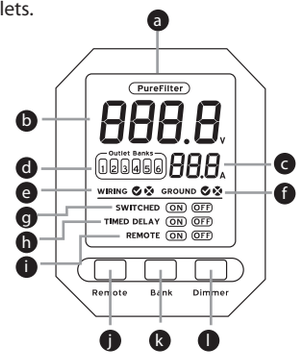
- LCD is indicating a ground fault: GROUND ✖
  Verify that the Power Conditioner is plugged into a grounded three-prong outlet. If, when verified, the ground fault indicator remains, the outlet to which the Power Conditioner is connected either has an improper ground or is not grounded. Consult an electrician to have the outlet properly grounded. If the outlet is properly grounded, and the LCD still indicates a ground fault, refer to this manual for DITEK contact and warranty information.

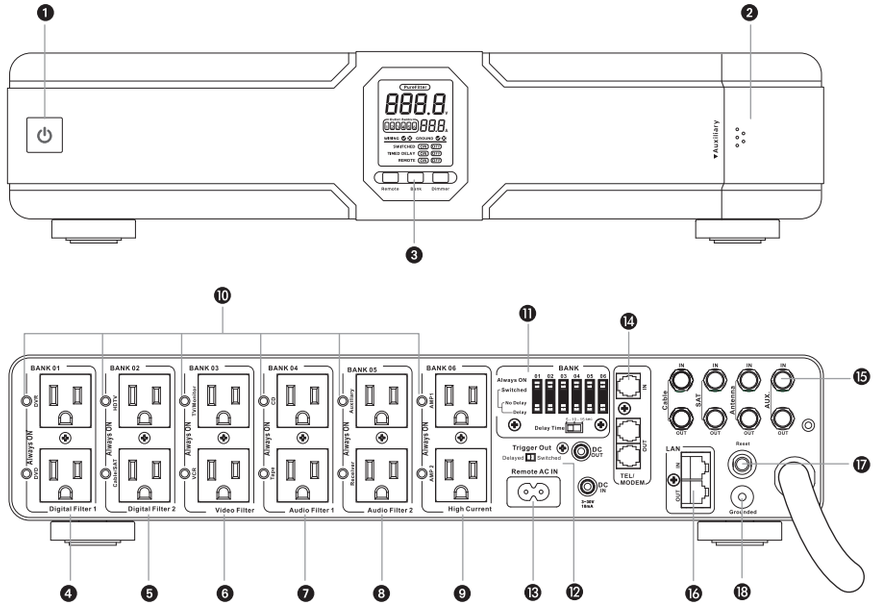
Category	Figure	Connection
Phone Line		To connect your Cable/SAT receiver to your telephone line. These provide one IN port and two OUT ports. They are standard RJ11 phone jacks.
Network Line		To connect your Media Center PC or game console to an Ethernet network line. They are standard RJ45 Ethernet jacks.
DSS / COAX Lines		To connect your Cable TV, Satellite TV, Antenna, HDTV, Broadband and other coaxial-cable line.

Operation

LCD Control Panel

The DTK-HT1000 Home Theater Power Conditioner features an advanced LCD Control Panel. The LCD status display allows users to monitor input voltage and output current on each individual bank of outlets.





Key to Features

1. On/Off Switch – turns switched outlet power on and off

2. Front-Mounted Outlet – provides power for digital components and is ideal for temporary connection of equipment such as camcorders, digital still cameras, MP3 players, or any other portable device you wish to power. This outlet is active when power to "Bank 1" is on.

3. LCD Display & Control Panel – controls and monitors the HT1000's main functions

4. Filter Bank 1 – offers optimum reduction of line noise and interference to your digital components

5. Filter Bank 2 – offers optimum reduction of line noise and interference to your digital components

6. Video Filter – offers optimum reduction of line noise and interference to your video components

7. Audio Filter 1 – offers optimum reduction of line noise and interference to your audio components

8. Audio Filter 2 – offers optimum reduction of line noise and interference to your audio components

9. High Current – provides high current to high power amplifiers and audio devices; optimized to filter out line noise to these components

10. Always On Indicator – When the "Always On" led is lit, it indicates that the outlets are programmed under "Always On" operation, and provide constant AC power

11. Programmable bank switches – allow you to configure each bank of outlets
* NOTE: Each outlet has an LED indicating power on/power off status. When LED is lit, power to the outlet bank is active. When LED is not lit, the outlet is not supplying AC power to equipment.

12. Trigger Out – allows for remote operation of peripheral devices equipped with a low-voltage trigger

13. Remote AC/DC trigger – allows for remote turn on/off of switched outlets on the Power Conditioner (both AC and DC inputs are provided)

14. Telephone Line Input/Output – protects your internal modem, tel/fax, or DSL lines from power surges and spikes. Splitter allows use with two connected devices

15. DSS/Coax Line Input/Output – protects coaxial cable lines from power surges and spikes that can disturb and damage your equipments

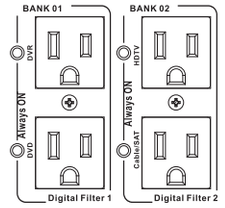
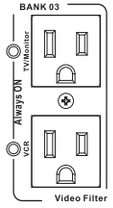
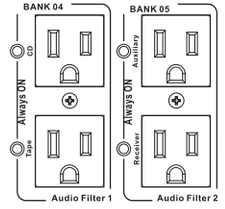
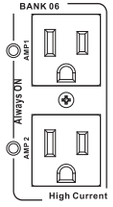
16. Ethernet Network Input/Output – protects Ethernet network line from power surges and spikes

17. 15 Amp Overload Resettable Circuit Breaker – provides overload protection and manually recoverable function

18. External Ground – provides a common grounding point for ungrounded components

IV. Wiring Connection

Please refer to following recommended wiring connection list to connect your equipment.

Category	Figure	Connection
BANK 01 - Digital Filter 1 & BANK 02 - Digital Filter 2		Recommended connection devices – DVD, DVR, HDTV, Cable/SAT. * When the "Always On" LED is lit, it indicates that the outlets are active.
BANK 03 - Video Filter		Recommended connection devices – VCR, TV/Monitor. * When the "Always On" LED is lit, it indicates that the outlets are active.
BANK 04 - Audio Filter 1 & BANK 05 - Audio Filter 2		Recommended connection devices – Tape, CD, Receiver, Auxiliary. * When the "Always On" LED is lit, it indicates that the outlets are active. .
BANK 06 – High Current		These two outlets are specifically designed to filter out AC line noise while proving maximum current to amplifiers and other high-current audio components. They should be programmed for "Delay". This is to set your high-current amplifiers to turn on last and turn off first to avoid that annoying, and potentially damaging "thump" from getting to your speakers. Recommended connection device –Amplifier. * When the "Always On" LED is lit, it indicates that the outlets are active.

III. Remote DC Operation :

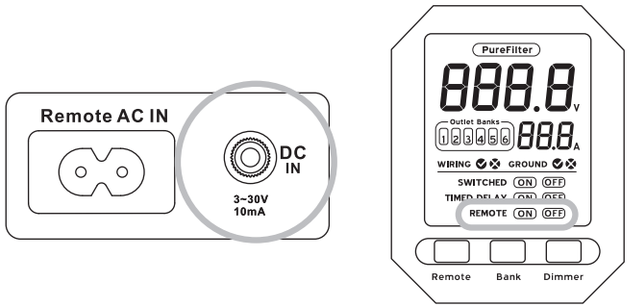
This function enables you to turn your HT1000 Power Conditioner on or off through any component that is equipped with a 3~30V DC output.

Note: The switched outlets of the HT1000 cannot be turned off via the On/Off button on the front of the unit when there is power supplied to the AC or DC remote inputs.

To install the Remote DC Control Cable:

a. Connect the Remote DC Control Cable into the outlet labeled "DC IN" on the rear panel of the HT1000.

b. Press the "Remote" button on the front of the HT1000 Power Conditioner to switch on the remote function.
The LCD display should now show "REMOTE ON" – see Figure 4.



Figu re 4

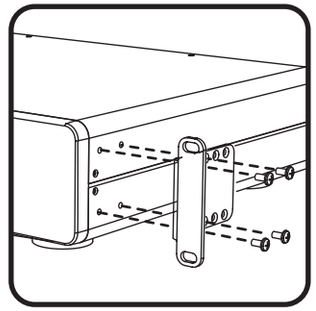
c. Turn off the Power Conditioner.

d. Plug another end of the Remote DC Control Cable into the 3~30V output on your component. When the component is turned on, the outlets on the Power Conditioner that are programmed as "Switched" will be turned on immediately and the "Switched/Delayed" outlets will be turned on after a delay set by the "Delay Time" switch.

Installation

Step 1: (optional)
Mounting your Power Conditioner

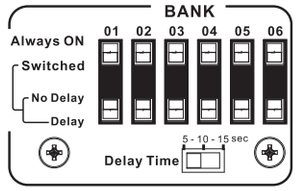
Your HT1000 Power Conditioner can be mounted to a standard AV equipment rack or inside a cabinet equipped with an equipment rack. See Figure 1.



Figu re 1

Step 2 :

Programming the Outlet Banks
The twelve outlets on the rear panel of the DTK-HT1000 are programmable, in 6 banks of 2 outlets each. Using the slide switches on the rear panel, each outlet can be programmed for Always On or Switched operation. Switched operation can be set turn on power to the outlets with or without delay. The length of the delay can be set for 5, 10, or 15 seconds. For tube-type amplifiers 15 seconds' delay is recommended.
See Figure 2.



Figu re 2

The No Delay setting will immediately power-on the outlets when the front-mounted ON/OFF switch is pressed.

The Delay setting will power-on outlets that are set for "Switched and Delay," at the time intervals set (5, 10 or 15 seconds). Note that all 6 banks do not have to be set for delay; they can be set individually.

The power-off routine will be in reverse sequence: Delay outlets will power-off first and No Delay outlets will power-off last. The Delay function protects speaker from the "thump" that is created when the amplifier voltage is stabilizing.

Note: The delay function can only be set on "Switched" outlets.

Step 3 :
Remote Operation Setup

I. Trigger Out:
This feature enables you to remotely control multiple power conditioners and an external device equipped with a remote trigger using a Remote DC Control Cable.

Connect the cable from the "DC OUT" to the "DC IN" on another Power Conditioner or external device to enable it.

The DC OUT port is a 1/8", 12V DC output jack.

There is one slide switch to set Trigger Out and two modes of "Delayed" and "Switched" for selection.

When the switch is set to "Delayed" the Trigger Out will send an activating/shut-down signal to an external device after a delay set by the Delay Time Switch.

There is no delay if the "Trigger Out" switch is set to "Switched".

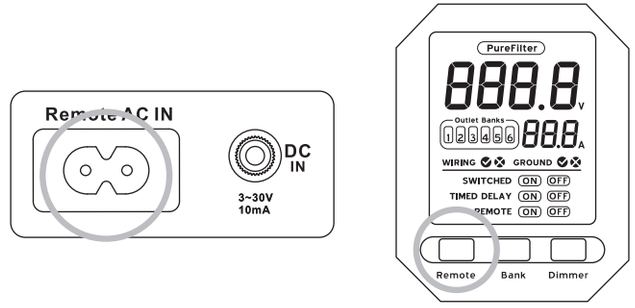
II. Remote AC Operation:

This function enables you to turn your HT1000 Power Conditioner On or Off through your preamplifier or receiver (when equipped with a switched AC power outlet).

Note: The switched outlets of the HT1000 Power Conditioner cannot be turned off via the On/Off button on the front of the unit when there is external power supplied to the AC or DC remote inputs.

To install the Remote AC Control Cable:

a. Plug the female end of the included Remote AC Control Cable into the "Remote AC IN" outlet located on the back of the Power Conditioner.
b. Press the "Remote" button on the front of the Power Conditioner to switch on the remote function.
   The LCD display should now show "REMOTE ON" – see Figure 3.



Figu re 3

c. Turn off the Power Conditioner.
d. Plug the 2-pronged male end of the Remote AC Control Cable into a switched power outlet on a preamplifier or receiver. When the receiver or preamplifier is turned on, the outlets on the Power Conditioner that are programmed as "Switched" will be turned on immediately and the "Switched/ Delayed" outlets will be turned on after a delay set by the "Delay Time" switch.